

# Roofing Fall Protection

- The following presentation can be used to satisfy the training requirements of the Fall Protection Standard in the WISHA Safety Standards for Construction - WAC 296-155-24505(3) & (4).
- Training is required as part of the fall protection work plan (see next slide to view WISHA rules on fall protection training).
- This training module contains generic information on fall protection in the roofing industry. It is best suited for new employees not familiar with fall protection.
- You will need to add work-site specific information to provide the necessary training for your employees and meet the intent of the WISHA regulations.

# WISHA Fall Protection Training Requirements

**WAC 296-155-24505 Fall protection work plan.**

**(1) The employer shall develop and implement a written fall protection work plan including each area of the work place where the employees are assigned and where fall hazards of 10 feet or more exist.**

**(2) The fall protection work plan shall:**

- (a) Identify all fall hazards in the work area.**
- (b) Describe the method of fall arrest or fall restraint to be provided.**
- (c) Describe the correct procedures for the assembly, maintenance, inspection, and disassembly of the fall protection system to be used.**
- (d) Describe the correct procedures for the handling, storage, and securing of tools and materials.**
- (e) Describe the method of providing overhead protection for workers who may be in, or pass through the area below the work site.**
- (f) Describe the method for prompt, safe removal of injured workers.**
- (g) Be available on the job site for inspection by the department.**

**(3) Prior to permitting employees into areas where fall hazards exist the employer shall:**

- (a) Ensure that employees are trained and instructed in the items described in subsection (2)(a) through (f) of this section.**
- (b) Inspect fall protection devices and systems to ensure compliance with WAC 296-155-4510.**

**(4) Training of employees:**

- (a) The employer shall ensure that employees are trained as required by this section. Training shall be documented and shall be available on the job site.**

# How to Use This PowerPoint Program

- Users with PowerPoint can download, edit, and use the program for training with a laptop and multimedia projector.
- Additional information is found in the Notes section at the bottom of each slide. You can read the text in quotations found in the Notes section or use your own words.
- If you want to print out this program, the PDF version uses less computer memory and prints faster.

# Meeting WISHA Training Requirements

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- To meet the WISHA training requirements for fall protection, you must include information specific to your worksite as indicated in slide #12.
- Preview this program and include your specific workplace information prior to conducting the training.
- It is recommended you keep an attendance roster for your records to document training.



# Roofing Fall Protection

This training will cover the following:

**Injuries from roof falls**

**When fall protection is required**

**Types of fall protection**

**Fall restraint equipment**



# Roofing Fall Hazards

## Falls From Roofs - what are the risks?

2 or 3 deaths and 130 serious injuries occur each year in Washington from falls from roofs.



It is easy to forget where the roof edge is when you are concentrating on your work.



It is nearly impossible to stop or catch yourself if you fall.

# Roofing Fall Hazards

## Can you catch yourself in a fall?

Most people do not have the strength to stop a fall greater than two feet.

It takes half a second to react to fall. In that time you will fall 4 feet.

When used properly, fall protection will **prevent serious injury or death.**





# Roofing Fall Hazards

It's not just the roof edge





# Roofing Fall Hazards

## Ladders are fall hazards too

A large number of injuries in roofing are falls from ladders.

Ladders must be stabilized and extend at least 3 feet above the roof edge.

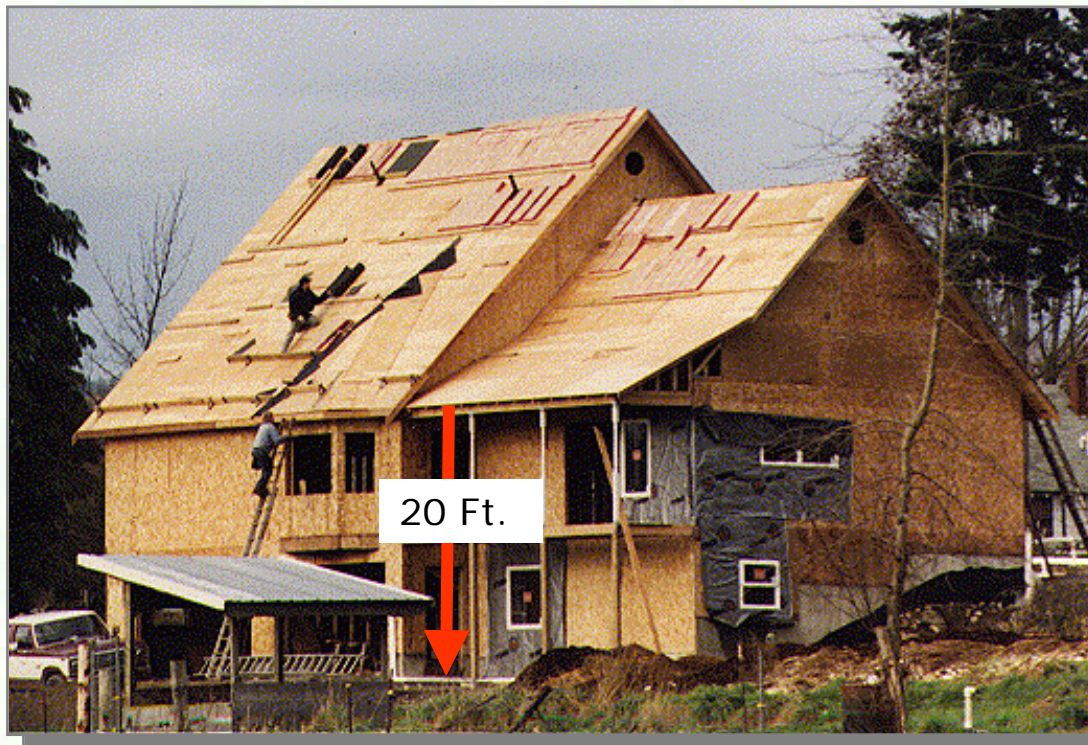
Both hands must be free when climbing a ladder.



# When Fall Protection is Needed

## The 10 foot rule

During roofing, fall protection is always required when the roof edge is more than **10 feet** above the ground or other surface.



**Fall protection is required on this roof since the roof edges are 10 ft. above the ground at all points.**

# When Fall Protection is Needed

## Low pitched roofs and fall protection

A roof with a slope of 4:12 or less is a low-pitched roof.

Fall protection is required on low-pitched roofs where the fall distance is 10 feet or more such as at the gable end.

Fall protection is not normally required on low-pitched roof edge work below 10 feet.



Fall protection required at gable end, but not horizontal roof edge.

# When Fall Protection is Needed

## Low-pitched roofs

A full-hipped low-pitched roof would not generally require fall protection if the roof edge is below 10 ft.





# When Fall Protection Is Needed

## Roofs with more than one level

Fall protection on roofs with two or more levels is normally required when the level you are working on is 10 feet or more above the ground.



# When Fall Protection is Needed

## Hazardous Slopes

Some roofs are considered “hazardous slopes” when they are steep, slippery or both.

A steep roof is one with a slope greater than 4 in 12.



When any roof is so steep or slippery that an uncontrolled fall would likely happen, fall protection is required at 6 feet.



# Roofing Fall Protection

## Types of Fall Protection

Fall Restraint – equipment that prevents a free fall in the first place.

Fall Arrest – equipment that stops a free fall in progress (in the middle of the fall).



# Fall Protection We Use

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Describe or show fall protection used by your company and/or at specific jobsites.

# Fall Restraint

## Fall restraint – three types

**Personal fall restraint – a body belt or harness connected to an anchor to prevent you from going over the edge of the roof,**

**OR**

**Guardrails,**



**OR**

**Warning line and safety monitor person.**



# Fall Restraint

## Personal Fall Restraint

**Fall restraint can be a body belt or full body harness.**



**You must be tied off so that you can never go past the roof edge, no matter where you work on the roof.**

**Gear should be adjustable to take up slack when you move about.**





# Fall restraint problem

A fall restraint lanyard too long to prevent a fall



# Fall Restraint

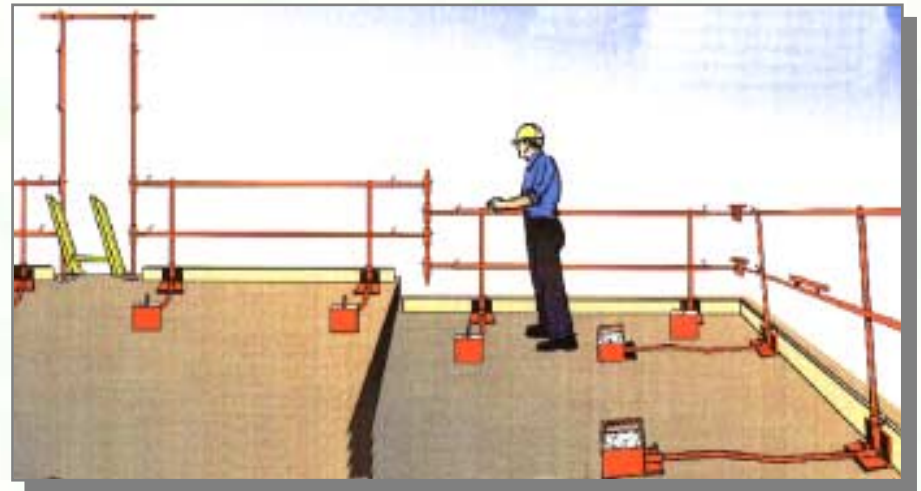
## Roof Edge Guardrails

**Are most practical on flat or low-pitched roofs.**

**Guardrail must be 39-45 inches high and have midrail and toeboard.**

**Must withstand 200 pounds of force in any direction.**

**Roof parapets must be over 39" high to act as guardrail.**





# Fall Restraint

## Roof Openings

Roof openings are also fall hazards and must either be covered or surrounded by a guardrail.



Skylights will usually break unless guarded or screened.



# Fall Restraint

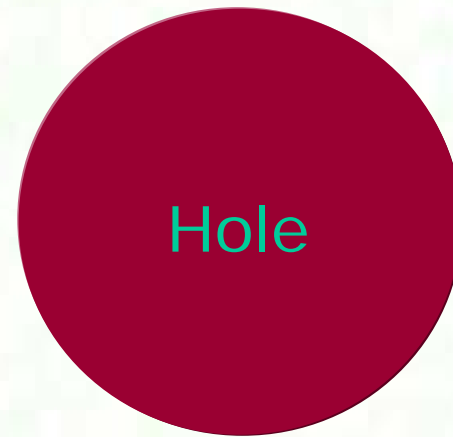
Hole covers must be:

Designed to support a minimum load of 200 lbs,

Secured with cleats or hinges,

Marked "Hole" or "Cover",

Hole must be attended if the cover is removed.



# Fall Restraint

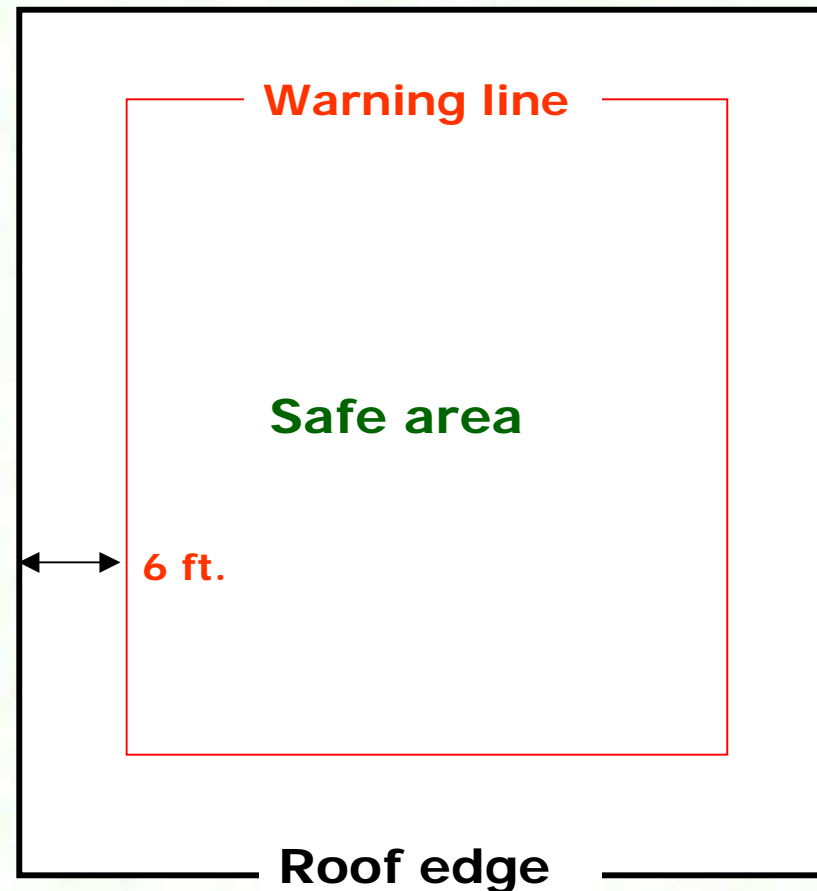
## Warning Line and Safety Monitor System

The warning line is installed six feet from the roof edge at a height of 36-42 inches.

Line is flagged every six feet.

Work outside the safe area requires a **safety monitor**.

Equipment cannot be used or stored outside safe area.



# Fall Restraint

## Working outside the warning line

You must either wear fall protection or have a **safety monitor** when working outside the warning line.

You must wear high visibility garment outside the line and take it off inside the line.



**Safety monitor**

# Fall Restraint

## Safety Monitor Duties

**Warns workers of fall danger.**

**Must be easily identified.**

**His only job is to watch and warn roofers.**

**Cannot have any other duties.**

**Can monitor up to eight workers.**

**Must be a clear view between him and workers.**



# End of Module 1

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Go to Module 2 to complete  
roofing fall protection training